



# PREVENT EYE DAMAGE

## Protect Yourself from UV Radiation



**M**ost Americans understand the link between ultraviolet (UV) radiation and skin cancer. Many are less aware of the connection between UV radiation and eye damage. With increased levels of UV radiation reaching the Earth's surface, largely due to stratospheric ozone layer depletion, it is important to take the necessary precautions to protect your eyes from being damaged.

### Potential Effects of UV Radiation on Eyes

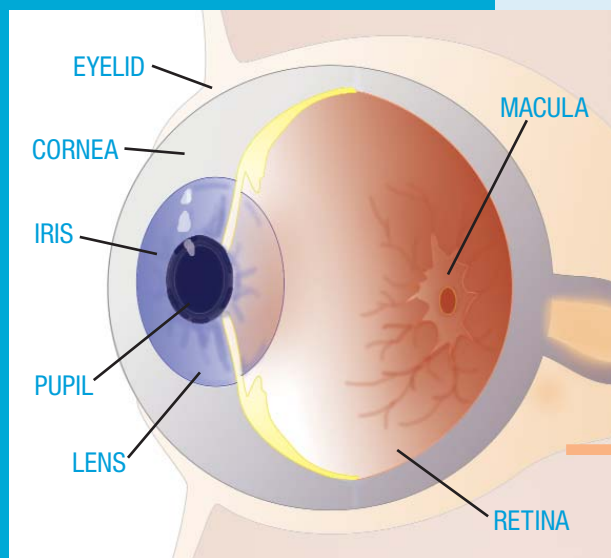
UV radiation, whether from natural sunlight or artificial UV rays, can damage the eye, affecting surface tissues and internal structures, such as the cornea and lens.

Long-term exposure to UV radiation can lead to cataracts, skin cancer around the eyelids, and other eye disorders.

In the short-term, excessive exposure to UV radiation from daily activities, including reflections off of snow, pavement, and other surfaces, can burn the front surface of the eye, similar to a sunburn on the skin.

The cumulative effects of spending long hours in the sun without adequate eye protection can increase the likelihood of developing the following eye disorders:

- ☀ **Cataracts:** A clouding of the eye's lens that can blur vision.
- ☀ **Snow Blindness (Photokeratitis):** A day at the beach without sunglasses; reflections off of snow, water, or concrete; or exposure to artificial light sources such as tanning beds, can cause a temporary but painful burn to the cornea of the eye.
- ☀ **Pterygium:** An abnormal, but usually non-cancerous, growth in the corner of the eye. It can grow over the cornea, partially blocking vision, and may require surgery to be removed.
- ☀ **Skin Cancer around the Eyelids:** Basal cell carcinoma is the most common type of skin cancer to affect the eyelids. In most cases, lesions occur on the lower lid, but they can occur anywhere on the eyelids, in the corners of the eye, under the eyebrows, and on adjacent areas of the face.



# EPA's SunWise Program: Educating Youth About Sun Safety

The SunWise Program is an environmental and health education program that aims to teach people how to protect themselves from overexposure to the sun. The school element of the program uses classroom, school, and community components to develop sustained sun-safe behaviors in children. Additional partnerships with local broadcast meteorologists, science centers, children's museums, and health experts provide numerous opportunities to deliver the SunWise message to youth, their care givers, and the general public. For more information about SunWise and how you can participate, please visit <[www.epa.gov/sunwise](http://www.epa.gov/sunwise)>.



## Did You Know....

- 20.5 million Americans have cataracts.
- The economic costs of visual disorders and disabilities in the United States in 2003 was estimated to be \$68 billion.

Source: National Eye Institute, U.S. National Institutes of Health <[www.nei.nih.gov](http://www.nei.nih.gov)>

## Preventative Measures for Eye Protection

Protect your eyes from UV exposure by wearing sunglasses that properly block UV-A and UV-B rays. Sunglasses should block 99-100 percent of UV-A and UV-B from reaching your eyes, so look for manufacturer labels that indicate UV protective

lenses. Wrap-around sunglasses are preferable because they keep UV rays from reaching the eyes. Additionally, a wide-brimmed hat offers some degree of eye protection, blocking UV rays from entering the eyes from the sides or above the sunglasses.

## Frequently Asked Questions

- Q: Does my eye color or skin color affect my risk for eye damage from UV radiation?
- A: No. All people, regardless of their eye or skin color, are susceptible to eye damage from UV radiation.
- Q: What should I look for when choosing a pair of sunglasses?
- A: No matter what sunglass styles or options you choose, you should insist that your sunglasses:
- Block out 99-100 percent of both UV-A and UV-B radiation.
  - Are perfectly matched in color and are free of distortion and imperfection.
- Q: Do I have to buy expensive sunglasses to ensure that I am being protected from UV radiation?
- A: As long as the label says that the glasses provide UV-A and UV-B protection, price should not be a deciding factor.

For more information contact:

The American Optometric Association  
<[www.AOA.org](http://www.AOA.org)>

The American Academy of Ophthalmology  
<[www.aaopt.org](http://www.aaopt.org)>

The National Eye Institute  
<[www.nei.nih.gov](http://www.nei.nih.gov)>

## REMEMBER!!

Exposure to UV radiation has cumulative effects on the eyes, with damage today leading to eye problems tomorrow.

**PROTECT YOUR EYES  
AND SIGHT...  
WEAR SUNGLASSES!**

